



SHARP FACTS

Syphilis



What is Syphilis?

Syphilis is a complex, sexually transmitted disease (STD) that is caused by the bacterium *Treponema pallidum*. The symptoms of infection with syphilis vary with its initial stage which are characterized by highly infectious open sores at the site of infection.

How common is syphilis?

In the United States, an estimated 70,000 new cases of syphilis in adults and more than 3,000 new cases of congenital syphilis in newborns occur each year. Of the 11 states with the highest syphilis rates in 1999, seven are in the Southeastern region of the U.S. Other places with very high reported levels of syphilis include Baltimore, St. Louis, and Danville Virginia.

How do people contract syphilis?

The syphilis bacterium is passed from person to person through direct contact with a syphilis sore. Sores mainly occur on the external genitalia, vagina, anus, or rectum. Sores can also occur on the lips and in the mouth. Transmission of the organism occurs during vaginal, anal, or oral sex. Pregnant women with the disease can pass it to the babies they are carrying. An infected pregnant woman has about a 40% chance of having a stillbirth (syphilitic stillbirth) or delivering a baby who dies shortly after birth. About 12% of infected newborns will die because of the disease.

What are the symptoms in adults?

The time between getting infected with the bacterium and the appearance of the first sign or symptom can range from 10-90 days (average 21 days). The first stage of syphilis is marked by the appearance of a single sore (called a chancre). The chancre is usually firm, round, small, and painless. It appears at the spot where the bacterium entered the body. The chancre lasts 1-5 weeks and heals on its own.

The second stage starts when one or more areas of the skin break into a rash that usually does not itch. Rashes can appear as the chancre is fading or can be delayed up to 10 weeks. The rash often appears as rough, "copper penny" spots on the palms of the hands and bottom of the feet. The rash may also appear as a prickly heat rash, as small blotches or scales all over the body, as a bad case of old acne, as moist warts in the groin area, as slimy white patches in the mouth, as sunken dark circles the size of a nickel or dime, or as pus-filled bumps like chicken pox. Some of these rashes on the skin look like those of other diseases. Sometimes the rashes are so faint they are not noticed. Rashes last 2-6 weeks and clear up on their own. In addition to rashes, second stage symptoms can also include fever, swollen lymph glands, sore throat, patchy hair loss, headaches, weight loss, muscle aches, and tiredness. A person can easily pass the disease to sex partners when first or second stage symptoms are present.

The latent (hidden) stage of syphilis begins when the secondary symptoms disappear. If the infected person has not received treatment, he/she still has syphilis even though there are no symptoms. The bacterium remains in the body and begins to damage the internal organs including the brain, nerves, eyes, heart, blood vessels, liver, bones, and joints. The results of this internal damage show up many years later in the late or tertiary stage of syphilis in about one-third of untreated persons. Late stage symptoms include inability to coordinate muscle movements, paralysis, loss of pain sensation, gradual blindness, dementia (madness) or other personality changes, impotence, shooting pains, blockage or ballooning of heart vessels, tumors or "gummas" on the skin, bones, liver, or other

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organs, severe pain in the belly, repeated vomiting, damage to knee joints, and deep sores on the soles of feet or toes. The damages may be serious enough to cause death.

How do I know if I have syphilis?

The syphilis bacterium can be detected by a health care provider who examines material from infectious sores under a microscope. Shortly after infection occurs, the body produces syphilis antibodies that are detected with a blood test. A syphilis blood test is accurate, safe, and inexpensive. A low level of antibodies will stay in the blood for months or years after the disease has been successfully treated, and can be found by subsequent blood tests. Because untreated syphilis in a pregnant women can infect and possibly kill her developing baby, every pregnant woman should have a blood test for syphilis.

Is there a cure?

One dose of the antibiotic penicillin will cure a person who has had syphilis for less than a year. More doses are needed to cure someone who has had it for longer than a year. A baby born with the disease needs daily penicillin treatment for 10 days. There are no home remedies or over-the-counter drugs that cure syphilis. Penicillin treatment will kill the syphilis bacterium and prevent further damage, but it will not repair any damage already done. Persons who receive syphilis treatment must abstain from sexual contact with new partners until the syphilis sores are completely healed. Persons with syphilis also must notify their sex partners so they can receive treatment as well.

How can I avoid contracting syphilis?

Two people who know they are not infected and who have no other sex partners besides each other cannot contract syphilis. When a person has sex with a person whose STD status is unknown, a latex condom put on before beginning sex and worn until the penis may reduce the risk infection. Only lab tests can confirm someone has syphilis. Because syphilis sores can be hidden in the vagina, rectum, or mouth, it is not obvious by looking to determine whether a partner has syphilis. Washing the genitals, urinating, or douching after sex does not prevent STDs. Any unusual discharge, sore, or rash, especially in the groin area, should be a signal to stop having sex and to see a doctor at once.

The health problems caused by the syphilis bacterium for adults and newborns are serious in their own right. It is now known that the genital sores caused by syphilis in adults also make it easier to transmit and acquire HIV infection sexually. Areas of the country that have the highest rates of syphilis in the U.S. also have the fastest growing HIV infection rates in childbearing women.

Where can I get more information?

Your medical care provider should be consulted if you think you may have been exposed to any sexually transmitted disease. CDC provides information through their National STD Hotline at (800) 227-8922. For further information regarding your sexual health, visit the Sexual Health and Responsibility Program Home Page at <http://www-nehc.med.navy.mil/hp/sharp>.

This information was adapted by the Sexual Health and Responsibility Program (SHARP), Directorate of Health Promotion and Population Health, Navy Environmental Health Center in Norfolk Virginia from material developed by the Centers for Disease Control and Prevention, National Center for HIV, STD & TB Prevention, Division of STD Prevention.